



Message from Donna Watts, Coordinator for Mathematics

- The public release items in each grade DO NOT represent the blueprint of the test. You are seeing real items but only a subset of what a student would actually experience on the test itself.
- The PDF may LOOK like an actual test, however, it only contains LESS THAN 20 ITEMS in any grade, which is SIGNIFICANTLY LESS than the number of items a student actually answers to determine his/her score.
- While these items were used with students, remember objectives can and WILL be assessed in a variety of ways. With this released item, you are seeing only ONE way to assess that objective.
- We are planning to add answers, student responses and annotations of student responses along with a link between the objective and the item. As that information is reviewed, it will also be uploaded.

Continue to page 2 MSA Public Release Items →



MSA

MARYLAND SCHOOL ASSESSMENT

MATHEMATICS PUBLIC RELEASE

Release Date: March 2009

GRADE
4



PEARSON



For selected-response questions, you may use the space inside the boxed area or scratch paper for notes and calculations. Be sure to fill in the bubble with your answer.

For constructed-response questions, you may use the space inside the boxed area or scratch paper for notes and calculations. Write your answers on the lines provided. You do not need to use the entire answer space. If you use scratch paper, remember: only what is written inside the boxed area will be scored.

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1

Amos buys 5 packs of 18 balloons. Crystal buys 3 packs of 24 balloons.

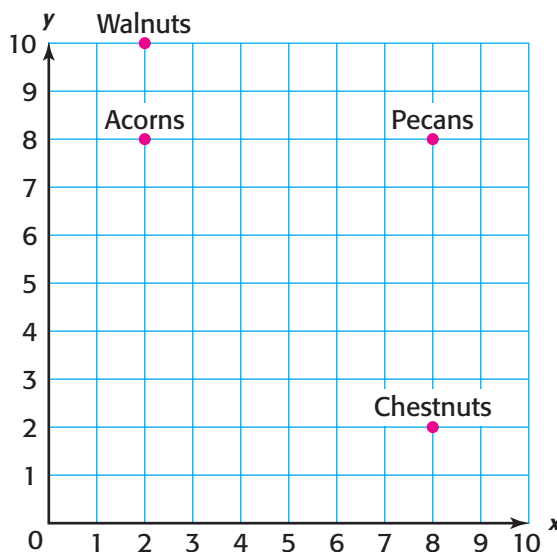
Which inequality shows the relationship between the number of balloons Amos buys and the number of balloons Crystal buys?

- (A) $5 \times 18 > 3 \times 24$
- (B) $5 \times 18 < 3 \times 24$
- (C) $5 + 18 > 3 + 24$
- (D) $5 + 18 < 3 + 24$



2

This grid shows where a squirrel hid different kinds of nuts.



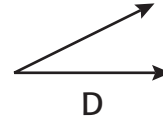
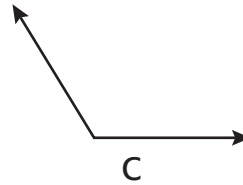
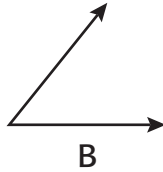
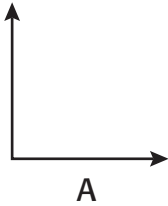
Which ordered pair shows where the squirrel hid the acorns?

- Ⓐ (2, 8)
- Ⓑ (2, 10)
- Ⓒ (8, 2)
- Ⓓ (8, 8)



3

Look at these angles.



Kara says that angle C is an obtuse angle.

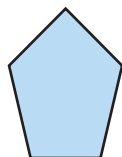
Which sentence best describes Kara's statement about angle C?

- (A) Kara is incorrect because angle C is a right angle.
- (B) Kara is incorrect because angle C is an acute angle.
- (C) Kara is correct because angle C is smaller than a right angle.
- (D) Kara is correct because angle C is larger than a right angle.



4

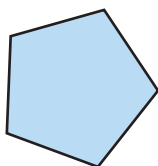
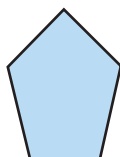
Which shows a transformation of the pentagon?



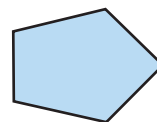
(A)



(C)



(B)



(D)



5

Martin lit a candle at 4:15 P.M. The candle burned until 7:45 P.M.

How many hours did the candle burn?

- Ⓐ $2\frac{1}{2}$ hours
- Ⓑ 3 hours
- Ⓒ $3\frac{1}{2}$ hours
- Ⓓ 4 hours

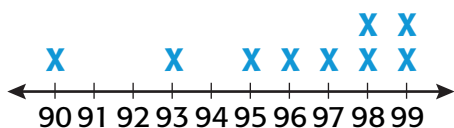


6

Hal raises ponies. The heights, in centimeters, of Hal's ponies are listed below.

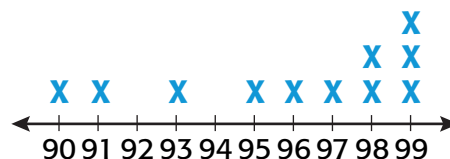
98 96 99 95 97 90 99 91 93 98

Which line plot displays this data?



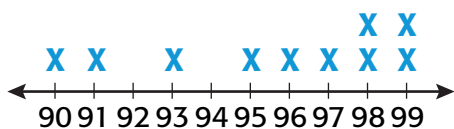
PONY HEIGHTS
IN CENTIMETERS

(A)



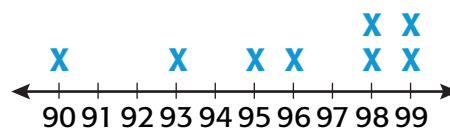
PONY HEIGHTS
IN CENTIMETERS

(C)



PONY HEIGHTS
IN CENTIMETERS

(B)



PONY HEIGHTS
IN CENTIMETERS

(D)



7

This data shows the scores Malia received on her science tests.

79 82 99 91 70 85 88 82

What is the range of Malia's test scores?

- (A) 3
- (B) 8
- (C) 20
- (D) 29



8

Mr. Brown puts colored straws in a bag. He puts 2 red straws and 1 white straw in the bag.

Step A

How many colored straws does Mr. Brown need to add to the bag so that red, white, and blue straws each have a $\frac{2}{6}$ probability of being picked?

Step B

Explain why your answer is correct.

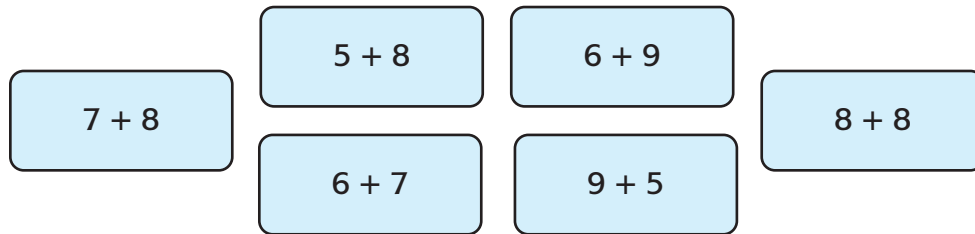
Use what you know about probability in your explanation.

Use words, numbers, and/or symbols in your explanation.



9

These cards are placed in a bag.



What is the probability Lauren will pick a card with a sum greater than 15?

$$\frac{1}{6}$$

(A)

$$\frac{1}{5}$$

(B)

$$\frac{3}{6}$$

(C)

$$\frac{2}{4}$$

(D)



10

Olivia made the number 506,890 with cards.

**Step A**

Write Olivia's number in word form.

Step B

Olivia removed the card with the five on it. Explain how this would change the word form of the number.

Use what you know about numbers and place value in your explanation.

Use words and/or numbers in your explanation.





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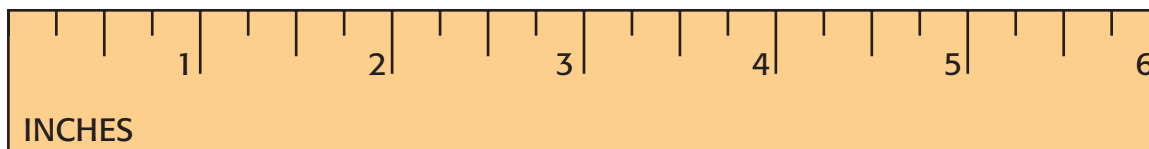
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11

Molly cut this piece of tape.



How long, in inches, is the piece of tape Molly cut?

- Ⓐ 4 inches
- Ⓑ $4\frac{1}{2}$ inches
- Ⓒ $4\frac{3}{4}$ inches
- Ⓓ 5 inches



12

Alicia read a book that has 144 pages. Alicia read 9 pages each day.

How many days did it take her to finish the book?

- Ⓐ 10 days
- Ⓑ 15 days
- Ⓒ 16 days
- Ⓓ 17 days



